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Redescription of a poorly known spider species, *Xysticus kulczynskii* Wierzbicki 1902 (Araneae: Thomisidae)

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Abstract — A poorly known species, *Xysticus kulczynskii* Wierzbicki 1902, is redescribed on the basis of material newly collected from Azerbaijan and Iran. The male is described for the first time. A diagnosis distinguishing the species from the European *X. ferrugineus* Menge 1876 is provided.

Key words — *Xysticus kulczynskii*, redescription, Azerbaijan, Iran

Introduction

Although the thomisid fauna of the ex-USSR can be considered relatively well studied, there are a number of poorly known species of uncertain taxonomic status, many of which are so far known only from the original description. *Xysticus kulczynskii* Wierzbicki 1902 is a good example of this. Having been described on the basis of a single female from Azerbaijan (Wierzbicki 1902), this species has so far been known only from the type locality. No attention has been paid to it until recently, when Azarkina & Logunov (2001) assumed that *X. kulczynskii* could be a member of the *cristatus* species group. Newly collected material from both Azerbaijan and Iran have allowed us to clarify the taxonomic status of this obscure species.

Specimens for this study were borrowed from, or are distributed among, the following museums and personal collections: MMUM — The Manchester Museum, the University of Manchester, Manchester, UK (Dr D. V. Logunov); MNHN — Museum National d'Histoire Naturelle, Paris, France (Dr C. Rollard); NHMW — The Arachnoidea Collection, Naturhistorisches Museum, Wien (Dr J. Gruber); PCCK — Personal collection of Dr Christian Komposch, Graz, Austria; ZMUM — The Zoological Museum of the Moscow State University, Moscow, Russia (Dr K. G. Mikhailov).

The format of the description and the terminology follows Ono (1988). All measurements are in mm.

Xysticus kulczynskii Wierzbicki 1902
(Figs. 1–3, 7, 9, 11–12, 15–19)

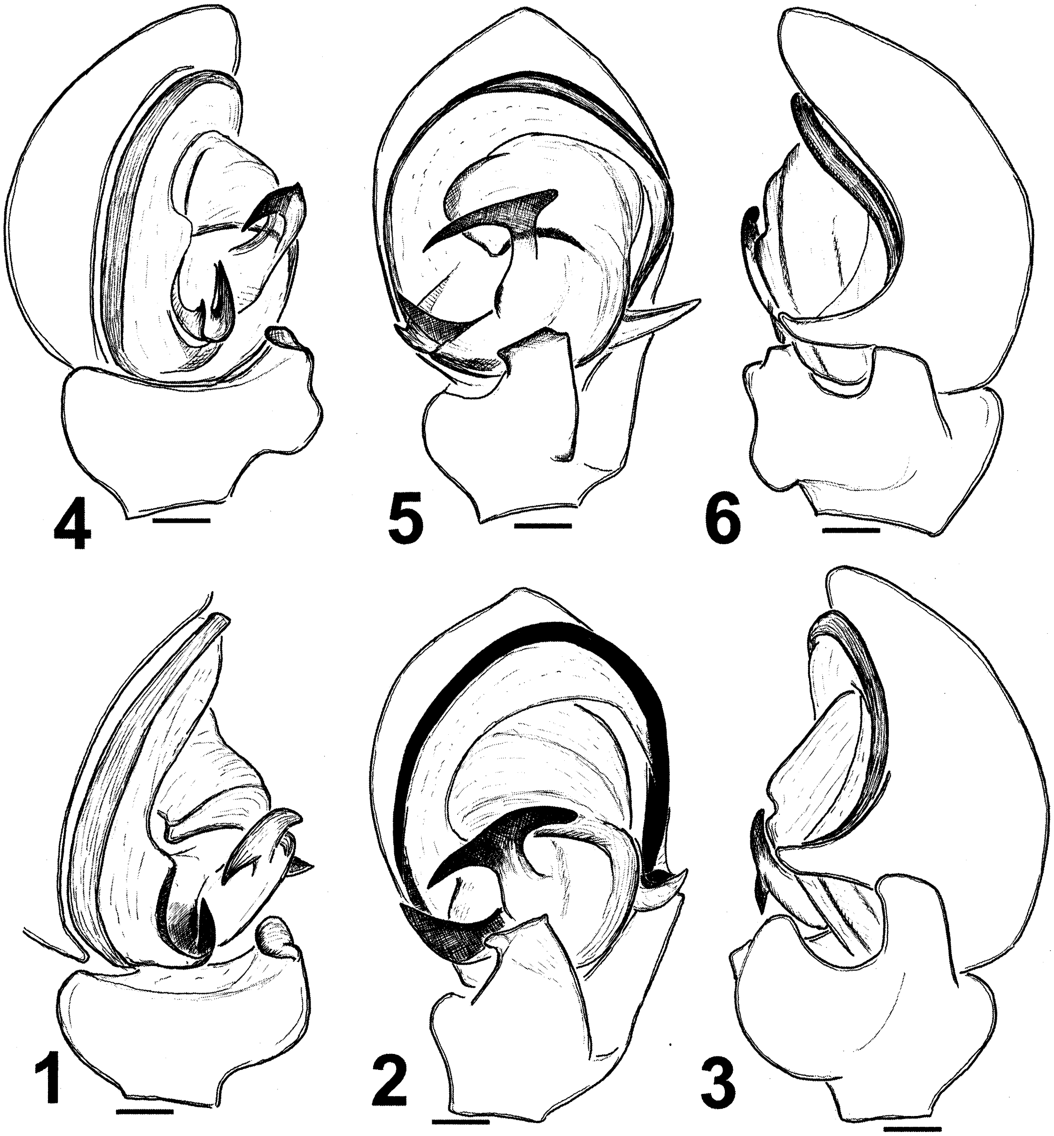
Xysticus kulczynskii Wierzbicki 1902, p. 475, pl. 5, fig. 3 (D♀; the ♀ holotype was not located and re-examined).

X. kulczynskii: Charitonov 1932, p. 158; Bonnet 1959, p. 4882; Roewer 1954, p. 902; Mikhailov 1996, p.128; Ibid. 1997, p. 201; Platnick 2002, www; Azarkina & Logunov 2001, p. 138.

Material examined. AZERBAIJAN: 2♂, 1♀ (MMUM), 1♂ (MNHN), Lenkoran Area, near Avrora (ca 38°40′N, 48°52′E), 23–28.04.2001, Yu. M. Marusik; 1♂, 1♀ (ZMUM), 1♂, 1♀ (NHMW), 1♂ (ZMUM), Astara Distr., Istisu, ca 10 km W of Astara (ca 38°27′N, 48°47′E), near Iran frontier, 25.04.2001, Yu. M. Marusik & E. Guseinov; 2♂, 2♀ (ZMUM), Siyazan Distr., ca 70 km N of Baku, Galaalty (ca 40°48′N, 49°12′E), ca 1000 m a.s.l., 19.04.2001, Yu. M. Marusik. — IRAN: 1♂ (PCCK; det. by E. Jantscher), Golestan, NP Golestan, Tange Gol (937, 22.163/55, 56.228), 700 m a.s.l., 18–19.5.2001, Ch. Wieser.

Comparative material: *Xysticus ferrugineus* Menge 1876 (Figs. 4–6, 8, 10, 13–14, 20–23): FRANCE (?): 2♂, 3♀ (MNHN, 870), "Alpes Mª, 5ª Agnis, 7. III. 1904" (label illegible, but this is apparently the Alpes Maritimes in the SE part of France).

Diagnosis. X. kulczynskii belongs to the *cristatus* group, as the apical tegular apophysis of its male palp bears a small basal tooth (arrowed in Fig. 11) like in most other members of this species group. This species is most closely related to *X. ferrugineus* (see Figs. 4–6, 8, 10, 13–14, 20–23) and *X. spasskyi* Utotchkin 1968 (see Utotchkin 1968: figs. 27–29, 79, 80, ♂ sub *X. umbrinus*; Ovtsharenko 1979: fig. 21). The males of *X. kulczynskii* can easily be distinguished from the both latter species by the stronger lateral branch of the median tegular apophysis (cf. Figs. 2, 7, 11 and 5, 8, 13); from *X. ferrugineus*, they also differ in the shape of the tutaculum

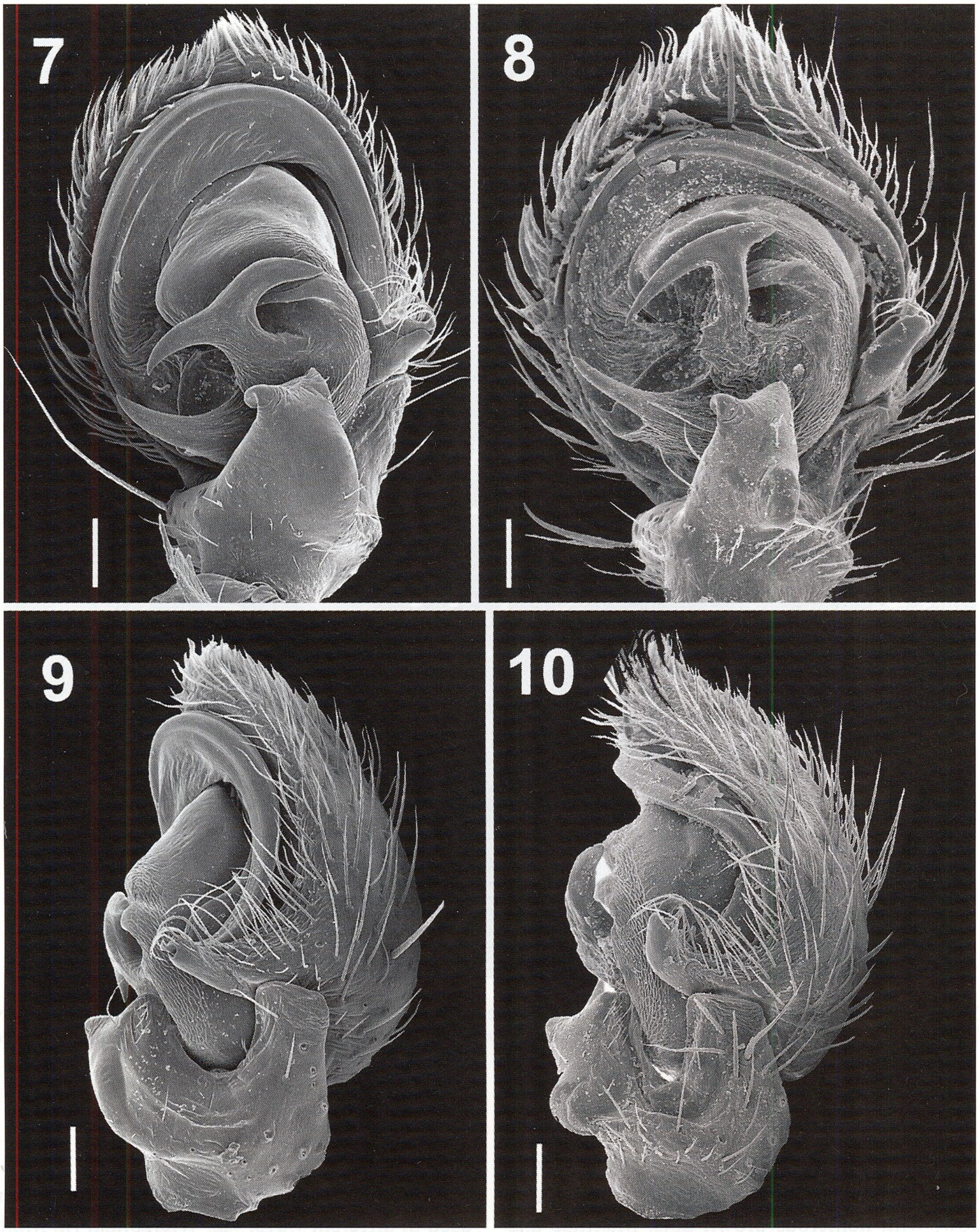


Figs. 1–4. Left male palps of *Xysticus kulczynskii* (1–3) (from Lenkoran, Avrora) and *X. ferrugineus* (4–6) (from France). — 1, 4, median view; 2, 5, ventral view; 3, 6, retrolateral view. Scale: 0.1 mm.

and the ventral tibial apophysis (cf. Figs. 3, 9 and 6, 10), while from *X. spasskyi* in the obtuse rather than the sharpened retrolateral tibial apophysis (cf. Fig. 9 and Utotchkin 1968: fig. 29). The females of *X. kulczynkii* differ from those of *X. ferrugineus* in the shape of median septum of the epigyne (cf. Figs. 15–17 and 21–23), which is situated in a shallow depression (raised in *X. ferrugineus*), and the tube-shaped insemination ducts (sac-shaped in *X. ferrugineus*) (cf. Figs. 19 and 20). Compared to females of *X. spasskyi*, those of *X. kulczynkii* differ in having a pair of ovoid fossae (lacking in the former species; see Utotchkin 1968: fig. 78); the spermathecae of *X. spasskyi* remains unstudied, thus cannot be thoroughly compared.

In the structure of the median tegular apophysis (the extended lateral branch), the males of *X. kulczynkii* are similar to those of *X. hedini* Schenkel 1936 (see Logunov 1995: figs. 3 A-C), but can be distinguished by the smaller ventral tibial apophysis, as well as by the shape of both the tutaculum and the retrolateral tibial apophysis (Figs. 3, 9).

Comments. X. kulczynkii was described by Wierzbicki (1902) on the basis of a single female from Gusar (=Kusary), Azerbaijan; with no further records having been reported so far. We have been unable to trace and re-examine the ♀ holotype, which seemed to have been kept in Lvov (Ukraine); at least the type is absent from the collections of the Institute of Zoology in Kiev (E. Perkovsky, personal communication). However, the female of *X. kulczynkii* is diagnosed by the rather characteristic epigyne having two fossae and the median apophysis situated in a shallow epigynal depression (Figs. 15–17); both characters are unknown in other congeners of the *cristatus* group. Thus, even on the basis of only the original figure of Wierzbicki (1902:



Figs. 7–10. Left male palps of *Xysticus kulczynskii* (7, 9) (from Lenkoran, Avrora) and *X. ferrugineus* (8, 10) (from France). — 7–8, ventral view; 9–10, retrolateral view. Scale: 0.1 mm.

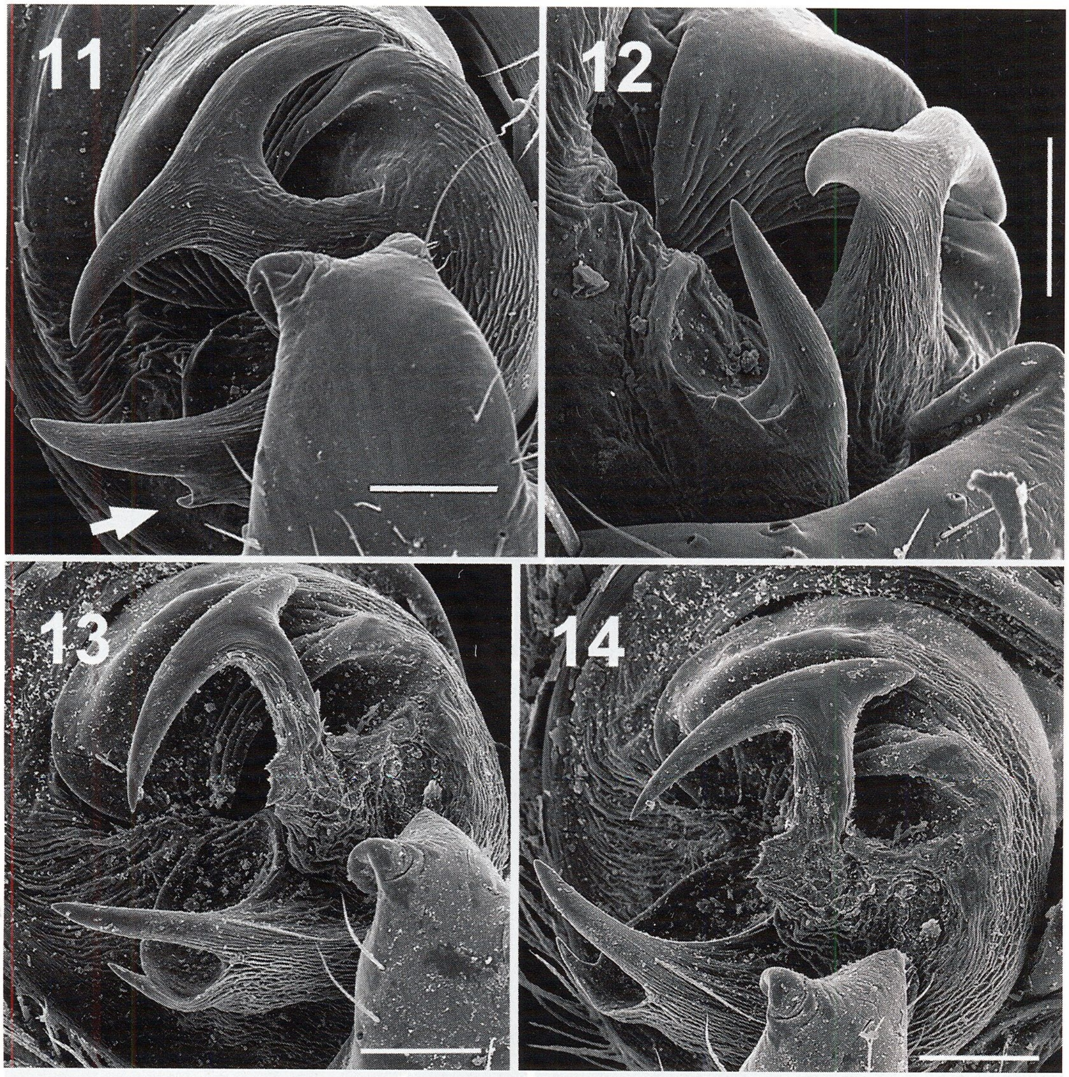
fig. 3; cf. Figs. 15 and 18) it is safe to conclude that we are dealing with *X. kulczynkii* rather than another related species.

Distribution. Azerbaijan and Iran (Wierzbicki 1902; present data).

Description (♂♀ from Lenkoran Area, Avrora). Measurements (♂/♀). Carapace: 2.05/2.80 long, 1.95/2.75 wide. Abdomen: 2.00/3.90 long, 1.75/3.25 wide. Clypeus 0.17/0.29 long, chelicera 0.66/0.86 long. Eye sizes and interdistances: MOA-WA 0.49/0.63, MOA-WP 0.49/0.66, MOA-L 0.48/0.55, AME 0.09/01.3, ALE 0.16/0.23, PME 0.09/0.11, PLE 0.13/01.17, AME-AME 0.30/0.43, AME-ALE 0.16/0.21, PME-PME 0.31/0.43, PME-PLE 0.36/0.56.

Legs measurements:

	Femur	Patella	Tibia	Metatarsus	Tarsus
I	1.95/2.38	0.85/1.03	1.53/1.68	1.50/1.50	0.85/0.95
II	1.93/2.45	0.80/1.00	1.50/1.70	1.50/1.50	0.88/0.95
III	1.45/1.78	0.65/0.78	1.23/1.25	0.90/0.90	0.63/0.78
IV	1.48/2.05	0.60/0.93	1.08/1.28	1.00/1.18	0.60/0.70



Figs. 11–14. Median and apical tegular apophysae of the male palps of *Xysticus kulczynskii* (11–12) (from Lenkoran, Avrora) and *X. ferrugineus* (13–14) (from France). — 11, 14, ventral view; 12–13, venral-median view. Scale: 0.1 mm. Arrowed is a small tooth of the apical tegular apophysis.

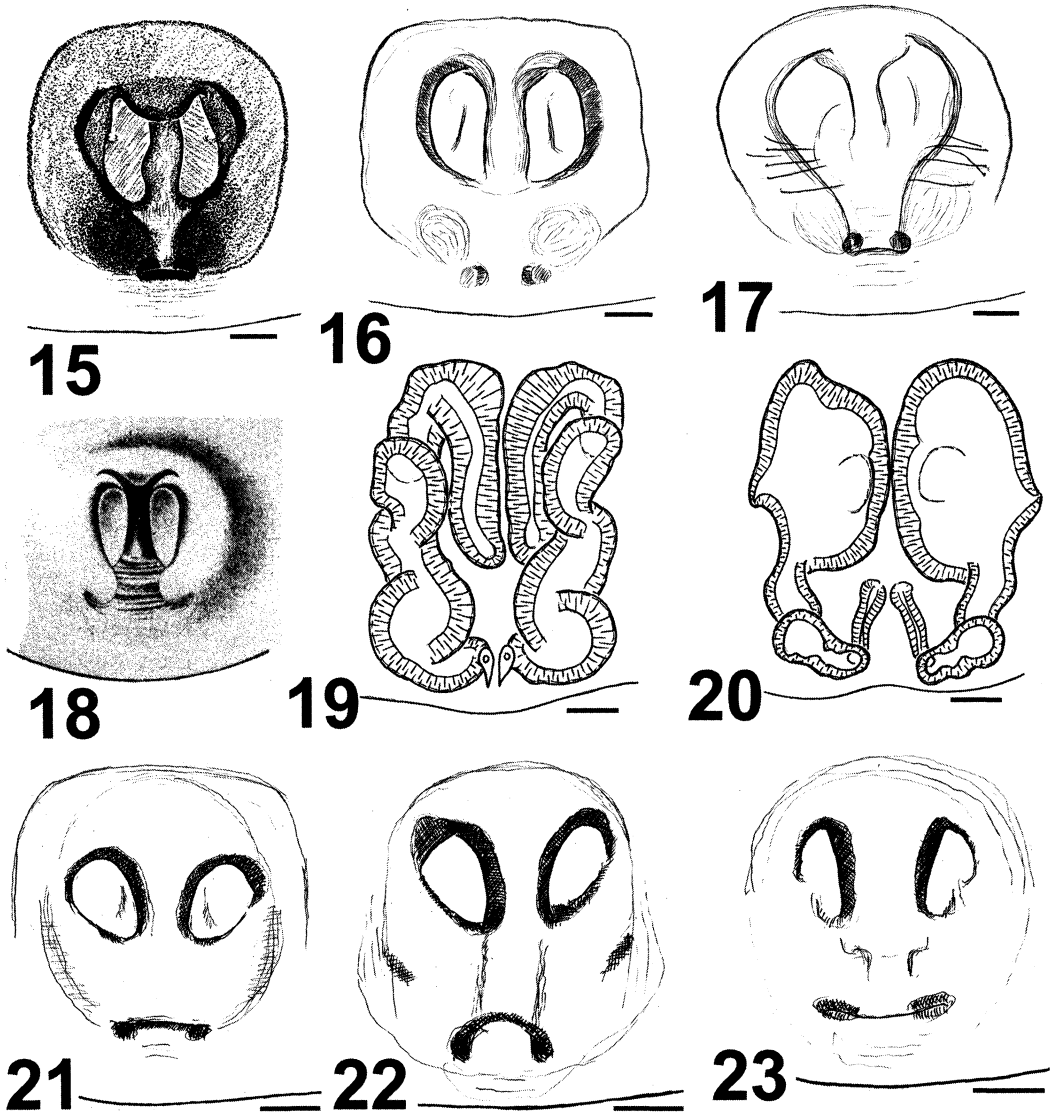
Coloration. Male. Carapace yellow-brown, with a wide median brownish cream band and V-shaped white figure. Sternum yellow, with numerous brown dots. Maxillae and labium yellowish brown. Abdomen: dorsum dark brown, with a characteristic white, fir-tree-shaped median band (as in all *Xysticus*); venter dark brown, with white patches. Book-lung covers yellow. Spinnerets yellow-brown. All legs yellow, with irregular brown patches, but femora I and II entirely dark brown (almost black), while patellae I and II yellow-brown. Spination of leg I: Fm d 0-0-1-1-1, pr 9 spines, Tb pr 1-1-1, rt 0-1-0, v 2-2-2-2 ap, Mt pr and rt 0-1-1 ap, v 0-2-2-2 ap. Palpal structure as in Figs. 1–3, 7, 9, 11–12.

Female. Coloration as in male, but lighter (elsewhere light yellow-brown instead of dark brown). Spination of leg I: Fm d 0-1-0, pr 1-1-1, Tb v 2-2-2-2 ap, Mt pr 1-1-1 ap, rt 0-0-1, v 1-2-2-2 ap. Epigyne and spermathecae as in Figs. 15–19.

Note. The orthography of the author's name has been used in different ways, viz. Wierzbitzki (in Mikhailov 1996, 1997), Werjbitzky (in Platnick 2001) or Verzhbitskii (in Azarkina & Logunov 2001). This author was of Polish origin and therefore we have used a different spelling of his name, Wierzbicki, as it should be spelled in Polish (J. Prószyński, personal communication).

Acknowledgments

We wish to express our deep gratitude to Drs Elke Jantscher and Christian Komposch (Graz, Austria) for allowing us assess to their unpublished data on *X. kulczynskii* from Iran. Dr J. Dunlop (Berlin, Germany) is much obliged for linguistic help. This work was supported in part by the Russian Foundation for Basic Research (grant #01-04-48989) and the Academy of Finland (project #79224).



Figs. 15–23. Female copulatory organs of *Xysticus kulczynskii* (15–19) (15, 16, 19, from Lenkoran, Avrora; 17, from Galaalty; 18, the original figure 3 from Wierzbicki 1902) and *X. ferrugineus* (20–23) (from France). — 15–18, 21–23, epigyne; 19–20, spermathecae. Scale: 0.1 mm.

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Erratum 訂正

Kronestedt, K. & Marusik, Y. M. 2002. On *Acantholycosa solituda* (Levi & Levi) and *A. sterneri* (Marusik) (Araneae: Lycosidae), a pair of geographically distant allied species. Acta Arachnologica, 51(1): 63–71.

Unfortunately, in the above paper, the caption of Map 1 on page 71 was erroneously printed. P. 71. caption of map 1. "*Acantholycosa solituda* (solid circles) and *A. sterneri* (asterisks)" should read "*Acantholycosa solituda* (asterisks) and *A. sterneri* (solid circles)"

The editor would like to apologize for any confusion this may have caused.

The correct version is reproduced below. Please photocopy the slip and paste it at an appropriate position on the page 71.

おわびと訂正：本誌前号の上記論文の Map 1 の説明文に誤りがありました。正しくは下記のとおりです。

Map 1. Collection localities of *Acantholycosa solituda* (asterisks) and *A. sterneri* (solid circles). An open circle nearby Lake Baikal refers to specimen from Irkutsk without precise locality and date.

Acta Arachnologica Vol. 51, No. 2 掲載論文の和文要旨

ロシア沿海州からの興味のもたれる数種のクモの新記録 (pp. 93–98)

Tatyana I. Oliger[1], Yuri M. Marusik[2], Seppo Koponen[3] (Nizhnesvirski State Reserve, Russia; [2]IBPN RAS, Magadan, Russia, [3]Zoological Museum, University of Turku, Finland) (pp. 93–98)

ロシア沿海州から5科11属15種のクモの記録を掲げ，それぞれの分布を表示した．これらのうち1科，5属，10種はロシアから初めて，14種は沿海州では初めての記録である．コモリグモ科の1属 *Triccosta* Roewer 1960 を再び有効とし，*Larinioides chabarovi* (Bakhavalov 1981) の標徴形質を掲げた．アジア極東におけるマシラグモ科とヤミサラグモ属 *Arcuphantes*（サラグモ科）の分類について議論した．（和訳：編集委員会）

あまり知られていないカニグモ属の1種 *Xysticus kulczynskii* Wiezbicki 1903（クモ目カニグモ科）の再記載 (pp. 99–104)

Dmitri V. Logunov[1], Yuri M. Marusik[2], Seppo Koponen[3] ([1]The Manchester Museum, The University of Manchester, UK; [2]IBPN RAS, Magadan, Russia; [3]Zoological Museum, University of Turku, Finland) (pp. 99–104)

これまで正体が不明瞭であったカニグモ属の1種 *Xysticus kulczynskii* Wiezbicki 1903 をアゼルバイジャンとイランから新たに採集された材料にもとづき再記載した．雄は初めての報告である．近似種であるヨーロッパ産の *X. ferrrugineus* Menge 1876 との識別点を掲げた．（和訳：編集委員会）

日本産キレアミグモ属のクモ (pp. 105–107)

谷川明男（〒248-0025 神奈川県鎌倉市七里ガ浜東 2-3-1　神奈川県立七里ガ浜高等学校）

ヤマキレアミグモは *Zygiella montata* (C. L. Koch 1834) に同定されてきたが，Levi (1974) の図，およびカナダ産の標本との照合の結果，*Zygiella dispar* (Kulczyński 1885) であることを確認し，再記載した．

日本産アシダカグモ科，II．初記録となるカワリアシダカグモ属の新種およびコアシダカグモ属の新種（クモ目：アシダカグモ科：アシダカグモ亜科）(pp. 109–124)

P. Jäger[1]・小野展嗣[2]（[1]Sektion Arachnologie, Forschungsinstitut Senckenberg, Senckenberganlage 25, D-60325 Frankfurt am Main, Germany; [2]〒169-0073 東京都新宿区百人町 3-23-1 国立科学博物館動物研究部）

日本から *Pseudopoda*（カワリアシダカグモ属）を初めて記録し，それに所属する2新種 *Pseudopoda kasariana*（アマミカワリアシダカグモ—新称）および *P. spirembolus*（オキナワカワリアシダカグモ—新称）をそれぞれ奄美大島と沖縄島から記載した．*Sinopoda*（コアシダカグモ属）の4新種，*S. albofasciata*（シロスジコアシダカグモ—新称；渡嘉敷島），*S. derivata*（シマコアシダカグモ—新称；トカラ中ノ島），*S. ogatai*（オガタヒメアシダカグモ—新称；愛知県），*S. stellatops*（ヒメアシダカグモ；本州（中国地方），四国，九州北部）を記載し，*Sinopoda koreana* (Paik, 1968)（トライコアシダカグモ—新称）を日本からはじめて記録した．さらに *Sinopoda okinawana* Jäger & Ono, 2000（リュウキュウコアシダカグモ）と *S. tanikawai* Jäger & Ono, 2000（アマミコアシダカグモ）の採集記録を追加した．コアシダカグモ属のなかに，以下に掲げる種に基づいて新たにリュウキュウコアシダカグモ種群を設定した：*S. albofasciata*（日本），*S. derivata*（日本），*S. fasciculata* Jäger, Gao & Fei 2002（中国），*S. hamata* (Fox 1937)（中国），*S. koreana* (Paik 1968)（韓国，日本），*S. okinawana* Jäger & Ono 2000（日本），*S. tanikawai* Jäger & Ono 2000（日本），*S. wangi* Song & Zhu 1999（中国）．